

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A color printer for printing to a photosensitive medium comprising:
 - a first light source for generating a first color beam;
 - a first modulator for modulating said first color beam;
 - a second light source for generating a second a color beam;
 - a second modulator for modulating said second color beam;
 - a third light source for generating a third color beam;
 - a third modulator for modulating said third color beam;
 - at least a fourth light source for generating a fourth color beam;
 - a fourth modulator for modulating at least said fourth color beam;
 - wherein a polarization of said fourth modulated beam is orthogonal to a polarization of said third modulated beam; and
 - an optical system for combining and imaging said modulated beams onto said photosensitive medium.
2. (original) A color printer as in claim 1 wherein said photosensitive medium is a motion picture film having at least four sensitive layers.
3. (original) A color printer as in claim 1 wherein said photosensitive medium is a motion picture negative film having at least four sensitive layers.
4. (original) A color printer as in claim 1 wherein said photosensitive medium is a motion picture print film having at least four sensitive layers.

5. (original) A color printer as in claim 1 wherein said photosensitive medium is a motion picture reversal film having at least four sensitive layers.
6. (original) A color printer as in claim 1 wherein said photosensitive medium is a photographic film having at least four sensitive layers.
7. (original) A color printer as in claim 1 wherein said photosensitive medium is a photographic negative film having at least four sensitive layers.
8. (previously presented) A color printer as in claim 1 wherein said photosensitive medium is a photographic print film having at least four sensitive layers.
9. (previously presented) A color printer as in claim 1 wherein said photosensitive medium is a photographic reversal film having at least four sensitive layers.
10. (original) A color printer as in claim 1 wherein said photosensitive medium is a photographic paper having at least four sensitive layers.
11. (currently amended) A color printer as in claim 1 wherein said modulators are reflective liquid crystal ~~diodes~~ devices (LCDs).
12. (currently amended) A color printer as in claim 1 wherein said modulators are transmissive liquid crystal ~~diodes~~ devices (LCDs).
13. (original) A color printer as in claim 1 wherein said modulators are digital micromirror devices.

14. (original) A color printer as in claim 1 wherein said modulators are gated light valves.

15. (original) A color printer as in claim 1 wherein said modulators are acousto-optic.

16. (previously presented) A color printer as in claim 1 wherein said modulators are comprised of electro-optic modulators.

17. (original) A color printer as in claim 1 wherein said light sources are selected from a group comprised of infra-red, red, green, yellow-green, blue-green, blue, and ultra-violet lasers.

18. (original) A color printer as in claim 1 wherein said light sources are selected from a group comprised of infra-red LED array, red LED array, green LED array, blue-green LED array, yellow-green LED array, a blue LED array, and an ultra-violet LED array.

19. (previously presented) A color printer as in claim 1 wherein each of said light sources are comprised of an array of light sources, wherein light sources in each array are selected from a group comprised of infra-red LED, red LED, green LED, blue-green LED, yellow-green LED, blue LED, and ultra-violet LED.

20. (original) A color printer as in claim 1 wherein said light sources are selected from a group comprised of laser, LED array, filtered xenon, and filtered tungsten.

21. (canceled)

22. (canceled)

23. (canceled)

24. (previously presented) A method of printing to a photosensitive medium comprising:

- generating a first color beam;
- modulating said first color beam;
- generating a second color beam;
- modulating said second color beam;
- generating a third color beam;
- modulating said third color beam;
- generating at least a fourth color beam;
- modulating at least said fourth color beam;

wherein said third modulated color beam and said fourth modulated color beam are orthogonally polarized; and

combining and imaging said modulated beams onto said photosensitive medium.

25. (previously presented) A method as in claim 24 wherein said photosensitive medium is a motion picture film having at least four sensitive layers.

26. (previously presented) A method as in claim 24 wherein said photosensitive medium is a motion picture negative film having at least four sensitive layers.

27. (previously presented) A method as in claim 24 wherein said photosensitive medium is a motion picture print film having at least four sensitive layers.

28. (previously presented) A method as in claim 24 wherein said photosensitive medium is a motion picture reversal film having at least four sensitive layers.

29. (previously presented) A method as in claim 24 wherein said photosensitive medium is a photographic film having at least four sensitive layers.

30. (previously presented) A method as in claim 24 wherein said photosensitive medium is a photographic negative film having at least four sensitive layers.

31. (previously presented) A method as in claim 24 wherein said photosensitive photographic print film having at least four sensitive layers.

32. (previously presented) A method as in claim 24 wherein said photosensitive photographic reversal film having at least four sensitive layers.

33. (previously presented) A method as in claim 24 wherein said photosensitive medium is a photographic paper having at least four sensitive layers.

34. (previously presented) A method as in claim 24 wherein said modulators are reflective LCDs.

35. (previously presented) A method as in claim 24 wherein said modulators are transmissive LCDs.

36. (previously presented) A method as in claim 24 wherein said modulators are digital micromirror devices.

37. (previously presented) A method as in claim 24 wherein said modulators are gated light valves.

38. (previously presented) A method as in claim 24 wherein said modulators are acousto-optic.

39. (previously presented) A method as in claim 24 wherein said modulators are electro-optic modulators, wherein combined light beams from said modulators are deflected by polygon scanners.

40. (previously presented) A method as in claim 24 wherein at least one light source is selected from a group comprised of infra-red, red, green, yellow-green, blue-green, blue, and ultra-violet lasers.

41. (previously presented) A method as in claim 24 wherein said light sources are selected from a group comprised of infra-red LED array, red LED array, green LED array, blue-green LED array, yellow-green LED array, blue LED array, and an ultra-violet LED array.

42. (previously presented) A method as in claim 24 wherein each of said light sources are comprised of an array of infra-red LEDs or red LEDs or green LEDs or blue-green LEDs or yellow-green LEDs or blue LEDs or ultra-violet LEDs.

43. (previously presented) A method as in claim 24 wherein said light sources are selected from a group comprised of laser, LED array, filtered xenon, and filtered tungsten.

44. (previously presented) A color printer for printing to a photosensitive medium comprising:

- a first light source for generating a first color beam;
- a first modulator means for modulating said first color beam;
- a second light source for generating a second a color beam;
- a second modulator means for modulating said second color beam;
- a third light source for generating a third color beam;
- a third modulator means for modulating said third color beam;
- at least a fourth light source for generating a fourth color beam;
- a fourth modulator means for modulating at least said fourth color beam;

wherein said third modulated color beam and said fourth modulated color beam are orthogonally polarized; and
an optical system for combining and imaging said modulated beams onto said photosensitive medium.

45. (original) A color printer as in claim 44 wherein said photosensitive medium is a motion picture film having at least four sensitive layers.

46. (original) A color printer as in claim 44 wherein said photosensitive medium is a motion picture negative film having at least four sensitive layers.

47. (original) A color printer as in claim 44 wherein said photosensitive medium is a motion picture print film having at least four sensitive layers.

48. (original) A color printer as in claim 44 wherein said photosensitive medium is a motion picture reversal film having at least four sensitive layers.

49. (original) A color printer as in claim 44 wherein said photosensitive medium is a photographic film having at least four sensitive layers.

50. (original) A color printer as in claim 44 wherein said photosensitive medium is a photographic negative film having at least four sensitive layers.

51. (original) A color printer as in claim 44 wherein said photosensitive photographic print film having at least four sensitive layers.

52. (original) A color printer as in claim 44 wherein said photosensitive photographic reversal film having at least four sensitive layers.

53. (original) A color printer as in claim 44 wherein said photosensitive medium is a photographic paper having at least four sensitive layers.

54. (original) A color printer as in claim 44 wherein said modulators are reflective LCDs.

55. (original) A color printer as in claim 44 wherein said modulators are transmissive LCDs.

56. (original) A color printer as in claim 44 wherein said modulators are digital micromirror devices.

57. (original) A color printer as in claim 44 wherein said modulators are gated light valves.

58. (original) A color printer as in claim 44 wherein said modulators are acousto-optic.

59. (original) A color printer as in claim 44 wherein said modulators are electro-optic modulators combined with polygon scanners.

60. (original) A color printer as in claim 44 wherein said light sources are selected from a group comprised of infra-red, red, green, yellow-green, blue-green, blue, and ultra-violet lasers.

61. (original) A color printer as in claim 44 wherein said light sources are selected from a group comprised of infra-red LED array, red LED array, green LED array, blue-green LED array, yellow-green LED array, blue LED array, and an ultra-violet LED array.

62. (previously presented) A color printer as in claim 44 wherein each of said light sources are comprised of an array of infra-red LEDs or

red LEDs or green LEDs or blue-green LEDs or yellow-green LEDs or blue LEDs or ultra-violet LEDs.

63. (original) A color printer as in claim 44 wherein said light sources are selected from a group comprised of laser, LED array, filtered xenon, and filtered tungsten.

64. (previously presented) A color printer for printing to a photosensitive medium comprising:

- a plurality first light sources for generating a first color beam;
- a plurality second light sources for generating a second a color beam;
- a plurality third light sources for generating a third color beam;
- at least a fourth light source for generating a fourth color beam;
- wherein said first, second, third, and fourth light sources are arranged as an array of light sources;
- wherein a number of light sources for each color is inversely proportional to a film sensitivity;
- a modulator for modulating said first, second, third, and fourth color beams; and
- an optical system for combining and imaging said modulated beams onto said photosensitive medium.

65. (original) A color printer as in claim 64 wherein said photosensitive medium is a motion picture film having at least four sensitive layers.

66. (original) A color printer as in claim 64 wherein said photosensitive medium is a motion picture negative film having at least four sensitive layers.

67. (original) A color printer as in claim 64 wherein said photosensitive medium is a motion picture print film having at least four sensitive layers.

68. (original) A color printer as in claim 64 wherein said photosensitive medium is a motion picture reversal film having at least four sensitive layers.

69. (original) A color printer as in claim 64 wherein said photosensitive medium is a photographic film having at least four sensitive layers.

70. (original) A color printer as in claim 64 wherein said photosensitive medium is a photographic negative film having at least four sensitive layers.

71. (previously presented) A color printer as in claim 64 wherein said photosensitive medium is a photographic print film having at least four sensitive layers.

72. (previously presented) A color printer as in claim 64 wherein said photosensitive medium is a photographic reversal film having at least four sensitive layers.

73. (original) A color printer as in claim 64 wherein said photosensitive medium is a photographic paper having at least four sensitive layers.

74. (original) A color printer as in claim 64 wherein said modulator is a reflective LCD.

75. (original) A color printer as in claim 64 wherein said modulator is a transmissive LCD.

76. (original) A color printer as in claim 64 wherein said modulator is a digital micromirror device.

77. (original) A color printer as in claim 64 wherein said modulator is a gated light valve.

78. (original) A color printer as in claim 64 wherein said modulator is an acousto-optic.

79. (original) A color printer as in claim 64 wherein said modulator is an electro-optic modulator.

80. (original) A color printer as in claim 64 wherein said light sources are selected from a group comprised of infra-red, red, green, yellow-green, blue-green, blue and ultra-violet lasers.

81. (original) A color printer as in claim 64 wherein said light sources are selected from a group comprised of infra-red LED array, red LED array, green LED array, blue-green LED array, yellow-green LED array, a blue LED array, and an ultra-violet LED array.

82. (previously presented) A color printer as in claim 64 wherein at least one of said light sources is selected from a group comprised of infra-red LED, red LED, green LED, blue-green LED, yellow-green LED, a blue, and an ultra-violet LED.

83. (original) A color printer as in claim 64 wherein said light sources are selected from a group comprised of laser, LED array, filtered xenon, and filtered tungsten.

84. (original) A color printer as in claim 64 wherein said optical system includes at least one raster scanning device selected from a group comprising:

a polygon, a hologon, or a galvanometer.

Claims 85-110 (canceled)

111. (previously presented) A color printer as in claim 1 wherein said optical system comprises an x-cube.